REMARKS

In view of the following remarks, Applicant respectfully requests reconsideration and withdrawal of the Rejection. Claims 1-19 are currently pending in the application with Claims 1, 8, 10, 11, 12, and 14 being independent. No new matter has been presented.

In the Office Action dated July 24, 2009, Claims 12, 18, and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Pub. No. 2002/0108040 to Ahmet Eskicioglu ("Eskicioglu") in view of U.S. Patent No. 7,072,657 to Watanabe et al. ("Watanabe"). Additionally, Claim 14 was rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,289,102 to Ueda et al. ("Ueda") in view of Eskicioglu.

As detailed below, it is respectfully submitted that Claims 1-19 are in condition for allowance and early notice of the same is solicited.

Applicant wishes to extend its appreciation to the Examiner for the indication that Claims 1-11, 16, and 17 are allowed, and that Claims 2, 9, 13, and 15 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, as stated on page 5 of the Office Action dated July 24, 2009.

Applicant notes that, on page 1 of the Action ("Office Action Summary"), Claims 1, 3-8, 10-12, 14 and 16-19 are indicated as rejected. **However**, the Action only provides a detailed rejection for Claims 12, 14, 18, and 19. Absent any communication to the contrary, Applicant assumes that the indication of Claims 1, 3-8, 10-12, 14 and 16-19 on page 1 of the Action is simply an unintentional clerical error.

Accordingly, it is respectfully submitted that the only remaining issues are with respect to claims 12, 14, 18 and 19, of which claims 12 and 14 are independent claims.

As an initial matter, in page 6 of the Action, the Office notes that independent claims 12 and 14 remain rejected because "the independent claim language does not state that the keys are obtained "in advance," as do claims 1 and 8.

Without conceding to the merits of such statement, and without prejudice or disclaimer, independent claims 12 and 14 have been amended as shown. **The independent claims 12 and 14 further recites "...in advance..." language. Accordingly, allowance of the remainder of independent claims 12 and 14, and claims 18 and 19 which depend from claims 12 and 14, respectively, is respectfully requested.**

Accordingly, Applicant respectfully requests that a Notice of Allowance be issued.

While the claims 12 and 14 have been amended, it is respectfully submitted that the amendment is not in response to the outstanding rejection as the Applicant continues to submit that a prima facie case of unpatentability has not been established.

For example, regarding the rejection of independent Claim 12, the Action dated July 24, 2009 alleges that Eskicioglu combined with Watanabe teaches every element of the claim. Applicant respectfully submits that the references cited fail to disclose or suggest the recited claims, and that a prima facie case of unpatentability is not established.

Claim 12 recites, "An apparatus for allocating a plurality of encryption keys differentiated according to a plurality of access authorization classes, the differentiated encryption keys provided to communicate data with corresponding access points, the apparatus comprising: an access authorization determining unit for determining an access authorization class for communication between a wireless station and an access point; an encryption key storing unit which stores the differentiated encryption keys; and an encryption key allocation unit which reads an encryption key from the encryption key storing unit corresponding to a determination result of the access authorization determining unit and transfers a value of the encryption key to the wireless station...."

Eskicioglu appears to teach a cryptography scheme for providing conditional access to a received scrambled audio/visual (A/V) signal. Descrambling keys are generated using keys (shares) transmitted by a service provider and keys stored in a smart card [paragraph 0002]. As shown in Figure 1, the A/V signal is transmitted from the service provider(s) to the smart card, which is inserted into or coupled to a digital television [paragraphs 0031-0033]. The smart card is manufactured with keys already stored therein, as a 'prepositioned' shared secret scheme. These

stored keys, along with an 'activating' key sent by the service provider, are used to reconstruct a scrambled signal from the service provider [paragraph 0038]. Since the stored keys are manufactured into the smart cards, modifying the scrambling key may be performed by changing the 'activating' key [paragraph 0044]. Subscribers in this conditional access system may be assigned different authorization levels by the different numbers of keys stored in their smart cards. Various levels of smart cards allow access to certain programming, such as basic television (Level 1 smart card), premium channels (Level 2 smart card), or Pay-Per-View (Level 3 smart card) [paragraphs 0088-0093].

Eskicioglu appears to teach in paragraph 0038 that a shared secret key is stored within both the transmitter (service provider) and the receiver (smart card). The smart card is manufactured with this shared secret key stored therein. Further, the smart card is merely used to reconstruct a symmetric key for descrambling a received A/V signal for display on a digital television [paragraph 0048]. As such, the above teaching by Eskicioglu is for a one-way communication system, there is no transmission from the receiver (smart card) to the transmitter (service provider). Applicant respectfully submits that the 'prepositioned' shared secret scheme used by Eskicioglu, which merely uses a shared key stored in both the transmitter and receiver, fails to disclose or suggest, for example, "an encryption key allocation unit which reads an encryption key from the encryption key storing unit corresponding to a determination result of the access authorization determining unit and transfers a value of the encryption key to the wireless station" (emphasis added), as recited in independent Claim 12.

In the instant Action, the Office cites paragraph 0092 of Eskicioglu, which states, "Level 3 Smart Card—each smart card is assigned a unique additional share." Again, this portion of Eskicioglu does not teach that the value of an encryption key is transferred to a wireless station. As noted above, the smart card is manufactured with its shared secret key stored therein. That is, the shared secret key is "assigned" and stored during manufacture, not "transferred" to the smart card.

Applicant further submits that Watanabe does not cure the deficiencies of Eskicioglu. Watanabe appears to disclose a method of coordinating the handoff of a mobile carrier between a first access network and a second access network. The method includes attempting a hand-off from a first access network that the mobile carrier is currently operating within to a second access

network, wherein the attempting includes authenticating at the hyper operator only that the user may have access to the second access network via a contract earlier established. (See Watanabe, for example: abstract; col. 5, lines 8-55; and col. 6, lines 60-65.)

Accordingly, it is submitted that a prima facie case of obviousness is not established.

Regarding the rejection of independent Claim 14, the Action dated July 24, 2009 alleges that Ueda combined with Eskicioglu teaches every element of the claim. Applicant respectfully submits that the references cited fail to disclose or suggest the recited claims, and that a prima facie case of unpatentability is not established.

Applicant notes that page 2 of the Action dated July 24, 2009 states, "Applicant's arguments, filed March 18, 2009 have been fully considered and they are persuasive." However, it appears that the rejection regarding Claim 14 is the same as was presented in the prior Action of December 18, 2008. If Applicant's prior arguments were in fact persuasive, the previous grounds of rejection were overcome. If Applicant's prior arguments were not persuasive, the Office did not address these arguments in the instant Action dated July 24, 2009. As noted in at least MPEP 707.07(f), the Office is required to answer and address all traversals. This requirement is in addition to any repetition of a previously held position and is required to allow the Applicant a chance to review the Examiner's position as to these arguments and to clarify the record for appeal.

In view of the above, Applicant has again presented the arguments drawn to Claim 14, as similarly found in the response dated March 18, 2009.

Claim 14 recites, "A computer readable storage medium storing instructions which, when executed causes execution of a program implementing a structure of a wireless data packet in a wireless network that comprises a wireless station and an access point, the structure comprising: a header of said data packet transmitted through the wireless network; an access authorization information storing field, which indicates access authorization for communication between the wireless station and the access point, wherein: the access authorization information storing field comprises access authorization information being used for allocating encryption keys differentiated according to access authorization classes, and the differentiated encryption keys

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are provided to...; an encrypted data field in which data contents to be transmitted are encrypted and stored; and an error correction field, which is used to correct data error."

Ueda appears to teach a method for protecting data stored on a recording means such as a disk, e.g. a CD-ROM (Compact Disk-Read Only Memory) or DVD (Digital Video Disk) (col. 1, lines 18-52; col. 2, lines 43-60). Ueda attempts to prevent content recorded on the disk from being illegally copied, but not require a special data reading means to reproduce the data (col. 3, lines 34-42; col. 9, lines 23-29). First key information is recorded in a lead-in area and second key information is recorded in a data recording area. The first key may descramble the second key, while the second key may descramble the data. The first key may be encrypted by a master key (col. 3, line 51-col. 4, line 9). The disk can then be accessed only by a disk reproducing device, but other devices (such as a computer) cannot access the disk (col. 7, lines 25-39).

Applicant respectfully submits, among other teachings, Ueda and Eskicioglu, individually or combined, fail to disclose or suggest "A computer readable storage medium storing instructions which, when executed causes execution of a program implementing a structure of a wireless data packet in a wireless network that comprises a wireless station and an access point, the structure comprising: a header of said data packet transmitted through the wireless network" and/or "an access authorization information storing field, which indicated access authorization for communication between the wireless station and the access point," as recited in independent Claim 14. In the Action dated July 24, 2009, page 4, it appears that Figures 1 and 13 of Ueda are asserted as allegedly disclosing the first of above-cited portions of Claim 14. Applicant respectfully submits that they do not, and invite the Office to verify for itself the same after a careful review of Ueda. Accordingly, it is submitted that a prima facie case of unpatentability is not established.

As noted above, Ueda appears to teach a method of encrypting the data on an information recording medium, such as a disk. The encryption allows the recording medium to only be accessible by a disk reproducing device. There appears to be no teaching or suggestion of any wireless elements in Ueda. Therefore, Applicant respectfully submits that Ueda, which merely teaches encrypting data, fails to disclose or suggest, "A computer readable storage medium storing instructions which, when executed causes execution of a program implementing a structure of a wireless data packet in a wireless network that comprises a wireless station and an

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access point, the structure comprising: a header of said data packet <u>transmitted through the</u> <u>wireless network</u>" (emphasis added), as recited in independent Claim 14. As a first point, Ueda appears to only teach the storing of keys and data; thus there appears to be no disclosure or suggestion in Ueda to store instructions to be executed. As a second point, Ueda appears to only teach encrypting an information recording medium; there appears to be no disclosure or suggestion in Ueda for a wireless data packet, a wireless network, or "a header of said data packet transmitted through the wireless network".

In the Action dated July 24, 2009, page 5, it appears that paragraphs 0038, 0047, and 0088-0094 of Eskicioglu are asserted as allegedly disclosing the second of the above-cited portions of Claim 14, "an access authorization information storing field, which indicated access authorization for communication <u>between</u> the wireless station and the access point" (emphasis added). As noted above, Eskicioglu appears to teach in paragraph 0038 that a shared secret key is stored within both the transmitter (service provider) and the receiver (smart card). The smart card is manufactured with this shared secret key stored therein. Further, the smart card is merely used to reconstruct a symmetric key for descrambling a received A/V signal for display on a digital television [paragraph 0048]. As such, the above teaching by Eskicioglu is for a <u>one-way</u> communication system, there is no transmission from the receiver (smart card) to the transmitter (service provider).

Further, Eskicioglu appears to suggest that the principles of his teachings may be applied to "a method and apparatus for secure communications between a sender and receiver of information" [paragraph 0096]. <u>However</u>, Applicant respectfully submits that Eskicioglu provides little or no support for this statement, much less any teaching or suggestion that is could be used in "an access authorization information storing field, which indicated access authorization for communication <u>between</u> the wireless station and the access point" (emphasis added), as recited in independent Claim 14.

Applicant submits that Eskicioglu does not cure the deficiencies of Ueda. Accordingly, it is submitted that a prima facie case of obviousness is not established.

With regard to dependent Claim 19, Applicant respectfully submits that the rejection is improper. On page 3 of the Action, Claim 19 is rejected on the same grounds as Claims 18 and 14: "Regarding <u>claims 18 and 19</u>, <u>Eskicioglu</u> as modified by <u>Watanabe et al.</u> teaches wherein…"

(emphasis in original). However, Applicant notes that Claim 19 depends from Claim 14, whereas Claim 19 depends from Claim 12. That is, while independent Claim 14 is rejected over Ueda in view of Eskicioglu, its depending Claim 19 is rejected over Eskicioglu in view of Watanabe.

Since Claim 19 depends from Claim 14, it incorporates the limitations of this base claim. As such, Applicant submits that any rejection of Claim 19 should include Ueda, used as the primary reference in the rejection of Claim 14. Moreover, the Office has provided no teaching, suggestion, or motivation to combine the references of Ueda, Eskicioglu, and Watanabe, as all three references would appear to be included in a rejection of Claim 19, in light of its dependency from Claim 14.

The Office may verify the above remarks for itself the same after a further review of Eskicioglu, Watanabe, and Ueda. It is submitted that the combination of Eskicioglu and Watanabe and the combination of Udea and Eskicioglu does not disclose or suggest each and every element of instant claims, and that a prima facie case of obviousness is not established.

In conclusion, the Applicant believes all claims are allowable and requests that a Notice of Allowance be issued. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters or place any issue in better condition for Appeal, the Examiner may contact Applicant's representative at the number given below.

Respectfully submitted,

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